UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/594,310	09/27/2006	Marzio Alessi	09952.0075	3800

			EXAMINER
22852	7590	02/11/2011	EDWARDS, LINCLAN E
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP			
901 NEW YORK AVENUE, NW		ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/594,310	ALESSI ET AL.
	Examiner	Art Unit	
	Linglan Edwards	2491	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *13 January 2011*.

2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *18-22 and 24-34* is/are pending in the application.

     4a) Of the above claim(s) *29-33* is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *18-22,24-28 and 34* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on *14 January 2010* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a)☐ All b)☐ Some * c)☐ None of:

       1. ☐ Certified copies of the priority documents have been received.

       2. ☐ Certified copies of the priority documents have been received in Application No. _____.

       3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
     Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
     Paper No(s)/Mail Date _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

1.   This communication is in respond to applicant's amendments filed on January 13, 2011. Claims 18-22 and 24-34 are pending, of which claims 29-33 have been withdrawn from consideration.

Examiner's Note

2.   Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully suggested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

Response to Arguments

3.   Applicant's arguments with respect to amended claims have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5.   Claims 18, 24-28 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over **US PG-PUB No. 2003/0115421 A1** to **McHenry et al.** (Cited in previous office action, hereinafter **McHenry**) in view of **US PG-PUB No. 2002/0152318 A1** to **Menon et al.** (hereinafter **Menon**), **US PG-PUB No. 2002/0010798 A1** to **Ben-Shaul et al.** (Cited in previous office action, hereinafter **Ben-Shaul**) and **US PG-PUB No. 2003/0028564 A1** to **Sanfilippo** (Cited in previous office action, hereinafter **Sanfilippo**).

As per **claim 18**, **McHenry** disclosed a method for controlling distribution of media contents over a network (**McHenry**: Abstract, network edge cache management system), wherein said contents comprise distributed contents available at surrogate servers (**McHenry**: Fig. 1, ref 22, 24, "EDGE SERVER") and remaining contents that are not available at the surrogate servers (**McHenry**: Fig. 1, content at the "ORIGIN SERVER"), comprising the steps of:

identifying contents eligible for distribution from the remaining contents (**McHenry**: paragraph [0013], "content selection server" identifies content in the bounded content domain);

defining a set of categories (**McHenry**: paragraph [0013], "predefined set of domain content identifiers" each corresponds to a category; also on page 6, claim 1, "selecting" and "grouping");

identifying for each category at least a reference content (**McHenry**: paragraph [0013], also claim 1 text, the meta-content description for each content group is the equivalent of a reference content);

associating said surrogate servers and said identified contents with said predefined categories (**McHenry**: paragraph [0013], "associate respective sets of predetermined cache management attributes with the plurality of content groups", and further on page 6, claim 15, the ache management attributes "designate corresponding content of said bounded domain for forward or reverse proxy caching by said plurality of network edge cache servers");

identifying at least one category, from said predefined categories, when the distributed contents associated with the category have an interest value that exceeds a threshold, wherein the interest value is indicative of user interest in the distributed contents (**McHenry**: paragraph [0031], "user access frequencies" corresponds to user interest, as one of ordinary skill in the art would recognize, some type of threshold has to be used for taking into account of the user access frequencies/ interest); and

making at least one of the identified contents associated with said identified category available for distribution at said surrogate servers (**McHenry**: paragraph [0013], cache control rule bases are distributed to the edge servers);

McHenry does not explicitly disclose receiving an input of an interest threshold to be used for identifying content group/category, in an analogous art in network content distribution, **Menon** disclosed a method and system where an input of an

interest threshold is received and used for identifying content to be distributed

(**Menon**: paragraph [0076], "if the frequency of access of a particular content

goes over a preset threshold, the system can trigger an operation that eventually

results in the "push" of the content from an origin server (or any other server) to

the rest of the edge servers (or to some sub-set of the rest of the edge servers)",

the input of threshold was received during the "preset"); it would have been

obvious to one of ordinary skill in the art at the time of the invention, to modify the

system of **McHenry** to incorporate the concept of using preset threshold of user

interest / access frequency in identifying content to be provided to edge server, to

use a preset threshold of user access frequency in identifying content group to

be distributed to edge servers, the motivation being for increased network system

efficiency;

McHenry-Menon does not explicitly disclose associating distributed contents

and said identified contents based on semantics affinity with said reference

content, in an analogous art in network content distribution, **Ben-Shaul** disclosed

a method and system that associates distributed contents and identified contents

based on semantics affinity (**Ben-Shaul**: paragraph [0063], the example of when

user request for a cook book, the server return a list of cook books, and

information regarding local food and cookware stores, indicates that contents are

associated with predefined categories based on semantics affinity; and

paragraph [0072], second version of the content derived from the origin web

server); one ordinary skill in the art would recognize that such association

method can be equally used for categorizing content at the original server; it would have been obvious to one of ordinary skill in the art at the time of the convention, to modify the system of **McHenry-Menon** to further incorporate the association contents based on semantics affinity from **Ben-Shaul**, the motivation being for increased system efficiency and ease of use, because using semantics affinity is just one way of categorization;

Although **McHenry-Menon-Ben-Shaul** does not explicitly disclose using a reference content to categorize addition content based on semantics distance, in an analogous art in network communications, **Sanfilippo** disclosed a method and system where additional content are categorized based on semantics affinity with reference content, where the semantics affinity is calculated as the distance between the additional content and the reference content (**Sanfilippo**: page 10, claim 27 text); it would have been obvious to one of ordinary skill in the art at the time of the invention, to modify the system of **McHenry-Menon-Ben-Shaul** to further incorporate the categorizing additional content based on calculation of semantic distance from **Sanfilippo**, the motivation being for increased system efficiency and ease of use, because how to categorize content is just a matter of implementation choice.

As per **claim 24**, **McHenry-Menon-Ben-Shaul-Sanfilippo** disclosed the method according to claim 23; although **McHenry-Menon-Ben-Shaul-Sanfilippo** does not explicitly disclose using two separate databases for storing classification

information, **Ben-Shaul** disclosed using two separate databases for storing content provided (**Ben-Shaul**: paragraph [0072], origin web server storage and edge server storage); it would have been obvious to one of ordinary skill in the art, to also apply the separated databases concept for storing classification information, the motivation being for increased data access efficiency.

As per **claim 25**, **McHenry-Menon-Ben-Shaul-Sanfilippo** disclosed the method according to claim 24, wherein said step of identifying at least one category comprises the steps of:

defining the interest threshold to be representative at least of a frequency of user requests for a given distributed content (**McHenry**: paragraph [0031], "user access frequencies"; and **Menon**: paragraph [0076]); and

extracting from said first database category information comprising at least one predefined category associated with said given distributed content when said interest threshold is exceeded (**McHenry**: paragraph [0031], "user access frequencies" corresponds to user interest, and **Menon**: paragraph [0076]).

As per **claim 26**, **McHenry-Menon-Ben-Shaul-Sanfilippo** disclosed the method according to claim 24, wherein said step of making at least one of the identified contents associated with said identified category available for distribution at said surrogate servers comprises the step of:

extracting from said second database contents information related to said at least one identified content (**Ben-Shaul**: paragraph [0063], extract information regarding local food and cookware stores when a cook book is requested).

As per **claim 27, McHenry-Menon-Ben-Shaul-Sanfilippo** disclosed the method according to claim 24 comprising the steps of:

identifying identified information comprising at least usage information provided by said surrogate servers ((**McHenry**: paragraph [0031], "user access frequencies"; and **Ben-Shaul**: paragraph [0054], statistics collection and reporting);

matching said additional information with said category information provided by said first database (**Ben-Shaul**: paragraph [0063], finding related information, i.e., matching content requested with category information; same matching method can be used for content frequently requested as well);

generating at least one class template comprising said matched information (**Ben-Shaul**: paragraph [0070], distribution policies change dynamically based on characteristic of differentiated content; the discloses identifies "class template" as "content distribution events/actions based on triggered policies for distributing the contents or for modifying the distribution policies);

adding to said class template said contents information provided by said second database (**Ben-Shaul**: paragraph [0069] [0070], policies (and new

policies) are stored on origin site, a database has to be inherently included for
the storage); and

forwarding said at least one modified class template to a distribution
system (**Ben-Shaul**: paragraph [0069], the edge servers get updates on their
policies from the origin site, i.e., the new policies are forwarded to the edge
servers from the origin site).

As per **claim 28, McHenry-Menon-Ben-Shaul-Sanfilippo** disclosed the method
according to claim 27 wherein said step of adding to said class template said
contents information provided by said second database comprises the steps of:

accessing a class template repository (**Ben-Shaul**: paragraph [0069]
[0070], policies (i.e. classes) (and new policies) are stored on origin site, a
database has to be inherently included for the storage, the policy repository has
to be accessed for the change to be recorded); and

modifying said class template according to said content information (**Ben-
Shaul**: paragraph [0069] [0070], policies (and new policies) are stored on origin
site, a database has to be inherently included for the storage).

As per **claim 34, McHenry-Menon-Ben-Shaul-Sanfilippo** disclosed a computer
readable medium encoded with a computer program product loadable into a
memory of at least one computer, the computer program product comprising
software code portions for performing the method of claim 18 (the rationale of

rejection and reasons of obviousness have been noted in the rejection of claim 1

above and applicable herein).

6.   Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable

over **McHenry** in view of **Menon**, **Ben-Shaul** and **Sanfilippo** as applied to claim 18

above, and further in view of **US Pat. No. 6,829,613 B1** to **Liddy** (Cited in previous

office action, hereinafter **Liddy**).

> As per **claim 19**, **McHenry-Menon-Ben-Shaul-Sanfilippo** disclosed the method
>
> according to claim 18; although **McHenry-Menon-Ben-Shaul-Sanfilippo** does
>
> not explicitly disclose the step of calculating semantics affinity comprising step of
>
> involving the use of data mining or artificial intelligence mechanisms, in an
>
> analogous art in electronic content providing, **Liddy** disclosed a method and
>
> system that calculating semantics affinity involves the use of artificial intelligence
>
> mechanisms (**Liddy**: col. 13, line 61 - col. 14, line 7, "decision tree" is an artificial
>
> intelligence mechanism), it would have been obvious to one of ordinary skill in
>
> the art at the time of the invention, to modify the system of **McHenry-Menon-**
>
> **Ben-Shaul-Sanfilippo** to further incorporate the using of artificial intelligence
>
> mechanisms for calculating semantics affinity from **Liddy**, the motivation being
>
> for increase ease of use, because what method to use for calculating semantics
>
> affinity is just a matter of implementation choice.

As per **claim 20**, **McHenry-Menon-Ben-Shaul-Sanfilippo-Liddy** disclosed the

method according to claim 19, wherein said mechanisms comprise at least a

mechanism selected from neural networks, fuzzy logic and decision trees (**Liddy**:

col. 13, line 61 - col. 14, line 7, decision tree).

7.   Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over

McHenry in view of **Menon**, **Ben-Shaul** and **Sanfilippo** as applied to claim 18 above,

and further in view of **US PG-PUB No. 2002/0062300 A1** to **Asadov et al.** (Cited in

previous office action, hereinafter **Asadov**).

As per **claim 21**, **McHenry-Menon-Ben-Shaul-Sanfilippo** disclosed the method

according to claim 18; although **McHenry-Menon-Ben-Shaul-Sanfilippo** does

not explicitly disclose using of searching engines in the step of identifying a

reference content, in an analogous art in electronic content providing, **Asadov**

disclosed a method and system where search engines are used for identifying

document by content (**Asadov**: paragraph [0020], [0050], search agents are

used for identifying document by semantics); it would have been obvious to one

of ordinary skill in the art at the time of the invention, to modify the system of

McHenry-Menon-Ben-Shaul-Sanfilippo to further incorporate the search

agents (search engines) from **Asadov**, the motivation being for improved system

efficiency.

8.   Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over
McHenry in view of **Menon**, **Ben-Shaul**, **Sanfilippo** and **Asadov** as applied to claims
18 and 21 above, and further in view of **US PG-PUB No. 2002/0188681 A1** to **Gruen et
al.** (Cited in previous office action, hereinafter **Gruen**).

As per **claim 22**, **McHenry-Menon-Ben-Shaul-Sanfilippo-Asadov** disclosed the
method according to claim 18, wherein said step of identifying for each category
at least a reference content comprises the steps of:

identifying a set of reference contents by using search engines (**Asadov**:
paragraph [0020], [0050], search agents are used for identifying document by
semantics; see motivation in the rejection of claim 21 above);

Although **McHenry-Menon-Ben-Shaul-Sanfilippo-Asadov** does not explicitly
disclose calculating a central reference content, in a analogous art in providing
electronic content, **Gruen** disclosed a method and system where a centroid
document (i.e. central reference content) is calculated for a set of documents
(**Gruen**: paragraph [0039], computing a centroid document for a cluster of
documents); it would have been obvious to one of ordinary skill in the art at the
time of the invention, to modify the system of **McHenry-Menon-Ben-Shaul-
Sanfilippo-Asadov** to further incorporate the calculating central reference
content from **Gruen**, the motivation being for increased system efficiency and
accuracy for categorizing documents.

Conclusion

9.   Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action.   Accordingly, **THIS ACTION IS MADE FINAL**.   See MPEP

§ 706.07(a).   Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action.   In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action.   In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

10.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Linglan Edwards whose telephone number is (571) 270-

5440. The examiner can normally be reached on 6:00AM-3:30PM EST Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Ashokkumar B. Patel can be reached on (571) 272-3972. The fax phone

number for the organization where this application or proceeding is assigned is 571-

273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/L. E./
Examiner, Art Unit 2491

/Ashok B. Patel/
Supervisory Patent Examiner, Art Unit 2491